

# Supplement to Environmental Assessment

## Smokey Project

USDA Forest Service, Mendocino National Forest  
Grindstone Ranger District  
Glenn County

### 1. Background

The Smokey Project is a vegetation management project designed to reduce hazardous fuels conditions within and adjacent to the Buttermilk Late Successional Reserve, foster ecological and economic benefits, and implement the Mendocino National Forest Land and Resource Management Plan.<sup>1</sup> In August 2012, an Environmental Assessment (EA) for the Project was completed pursuant to the Healthy Forests Restoration Act. This document is a supplement to that EA.

Two opportunities to provide Objections to the Smokey Project under 36 CFR Part 218 were provided in July 2010 and June 2012. Objections were received during each objection period and resolution meetings were held, but resolution of the objections was not reached.<sup>2</sup> The Objection Reviewing Officers reviewed and responded to the objections, and advised the Forest Supervisor to sign the Decision Notice at her discretion.

On August 30, 2012, the Forest Supervisor for the Mendocino National Forest issued the Decision Notice and Finding of No Significant Impact for the Smokey Project. The Decision Notice adopted Alternative 1 (the proposed action) from the EA, and incorporated the terms and conditions of the Incidental Take Statement section of the 2012 US Fish and Wildlife Service Biological Opinion.

#### *1.1. Delayed Implementation*

Several events have delayed implementation of the project. The following is a summary of those events:

- December 4, 2012: the U.S. Fish and Wildlife Service published a final, revised rule designating new critical habitat for the northern spotted owl (77 Fed. Reg. 71875). The rule became effective on January 3, 2013.
- September 23, 2013: Conservation Congress filed a lawsuit in the United States District Court for the Eastern District of California, challenging the Smokey Project.
- April 3, 2014: the Forest Supervisor transmitted a supplemental Biological Assessment to the U.S. Fish and Wildlife Service, to re-initiate formal ESA consultation to address newly designated Critical Habitat.

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<sup>1</sup> 2012 EA, pp. 3-13.

<sup>2</sup> 2012 DN/FONSI, p. 8.

- November 3, 2014: the U.S. Fish and Wildlife Service Field Supervisor issued a second Biological Opinion.
- May 21, 2015: the Forest Supervisor transmitted a second supplemental Biological Assessment to the U.S. Fish and Wildlife Service, to re-initiate formal ESA consultation to address newly designated spotted owl Activity Centers.
- July 24, 2015: the U.S. Fish and Wildlife Service Field Supervisor issued a third Biological Opinion.
- November 30, 2015: the Forest Supervisor issued a Supplemental Information Report for the 2012 EA and FONSI.
- February 17, 2017: the District Court for the Eastern District of California issued its summary judgment decision, finding that the Forest Service had complied with the ESA, NFMA, and most of its NEPA obligations. However, the Court also found that the Forest Service had violated NEPA in two regards: failing to take a “hard look” at some issues and failing to give adequate consideration to alternatives.
- May 30, 2017: the District Court issued its Final Judgment and remedy order, requiring the Forest Service to supplement the Smokey Project NEPA documentation and provide an objection process, both to be completed by December 1, 2017. The Court did not vacate the Project decision, but enjoined all harvest of trees greater than 20” dbh until the NEPA deficiencies had been remedied, as subsequently determined by the Court.

## ***1.2. Court-Ordered NEPA Remedies***

In its February 17, 2017 decision, the District Court stated:

“[T]he Court finds that the USFS’s decision not to consider, or even acknowledge, an alternative with a larger diameter cap was arbitrary and capricious.”<sup>3</sup>

“[T]he USFS’s failure to consider or address the alternatives raised during public collaboration renders the EA inadequate. This deficiency is one indication that the agency failed to take a hard look at the Project’s impacts.”<sup>4</sup>

“The Limited Operating Period is stated inconsistently throughout the record, making it difficult for Plaintiff, the Court, the public, and perhaps even the agency to know exactly how the LOP operates.”<sup>5</sup>

“the agency [] admits that [spotted owl] monitoring [for other projects] has not occurred and offers no explanation of why, no description of how the issue will be ameliorated, and no rationale for why this deficiency does not render the Project’s impacts ‘uncertain.’ It does not appear the agency took a hard look at this question.”<sup>6</sup>

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<sup>3</sup> *Conservation Cong. v. United States Forest Serv.*, No. 2:13-CV-01977-JAM-DB, 2017 WL 661959, at \*15 (E.D. Cal. Feb. 17, 2017).

<sup>4</sup> *Conservation Cong. v. United States Forest Serv.*, No. 2:13-CV-01977-JAM-DB, 2017 WL 661959, at \*16 (E.D. Cal. Feb. 17, 2017).

<sup>5</sup> *Conservation Cong. v. United States Forest Serv.*, No. 2:13-CV-01977-JAM-DB, 2017 WL 661959, at \*16 (E.D. Cal. Feb. 17, 2017).

<sup>6</sup> *Conservation Cong. v. United States Forest Serv.*, No. 2:13-CV-01977-JAM-DB, 2017 WL 661959, at \*17 (E.D. Cal. Feb. 17, 2017).

“Given the failure to address reasonable alternatives, the inconsistent LOPs, and the failure to address past monitoring practices, the Court finds that the USFS did not conform to NEPA and take the requisite hard look at the Project.”<sup>7</sup>

In its May 26, 2017 decision, the Court ordered:

- “1. USFS shall prepare supplemental NEPA analysis that cures the NEPA violations identified in the Court’s Merits Order and complies with the applicable statutes;
2. Should USFS conclude that no EIS is required, USFS shall circulate the analysis and draft revised DN/FONSI to the public;
3. USFS shall accept objections for a 20-day period from any party eligible to object under 36 C.F.R. § 218.5 (USFS is not required to accept public comment during remand other than during the objection period specified herein); and
4. USFS shall complete its supplemental NEPA documentation and public involvement process no later than December 1, 2017.”<sup>8</sup>

The Court ordered further:

“[The Forest Service and Trinity River Lumber Company] are enjoined from removing any trees with 20 inches dbh or greater in implementing the Project. The Court will retain jurisdiction to dissolve this limited injunction upon a showing that USFS has complied with this Court’s Order and satisfied its obligations under NEPA. The Court declines to vacate the DN/FONSI or require USFS to cancel its contract with Intervenor.”<sup>9</sup>

## **2. Purpose of This Supplement**

The purpose of this supplement is to conduct the NEPA analysis required by the Court’s February 17 and May 26, 2017 orders. The Forest Service provides supplemental information and analysis in Sections 5 through 7 of this supplement to cure its failure in the original NEPA documentation to fully address alternatives, explain the Limited Operating Periods (LOPs) for the northern spotted owl, and explain the spotted owl monitoring requirements for other projects on the Mendocino National Forest.

## **3. Relationship to the 2012 Environmental Assessment**

This supplement is intended to expand upon and clarify particular issues addressed in the 2012 EA. In the interest of efficiency and clarity, and to comply with the Council on Environmental Quality’s direction to minimize the bulk of NEPA documents (see 40 CFR 1500.1(b), 1500.4), this supplement does not revisit the entire 2012 EA, the vast majority of which was not at issue in the litigation that gave rise to this supplement.

Because this supplement is a stand-alone document and is intended to clarify and improve the disclosure in the 2012 EA, there may be sections of the two documents that

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<sup>7</sup> *Conservation Cong. v. United States Forest Serv.*, No. 2:13-CV-01977-JAM-DB, 2017 WL 661959, at \*17 (E.D. Cal. Feb. 17, 2017).

<sup>8</sup> *Conservation Cong. v. United States Forest Serv.*, No. 2:13-CV-01977-JAM-DB, Slip Op. at 7-8 (E.D. Cal. May 30, 2017).

<sup>9</sup> *Conservation Cong. v. United States Forest Serv.*, No. 2:13-CV-01977-JAM-DB, Slip Op. at 8 (E.D. Cal. May 30, 2017).

appear to be in tension, if not in direct conflict.<sup>10</sup> If such situations arise, this supplemental document shall take precedence over the 2012 EA. If ambiguities still remain over particular issues, we ask that readers identify such areas with specificity during the objection process.

#### **4. Public Involvement**

The Forest Service will accept public input on this supplement and the draft decision through the agency's objection process under 36 C.F.R. 218 Part A. Any party eligible to object under 36 C.F.R. § 218.5 may submit an objection related to the content of this supplement and the draft decision.

Pursuant to the District Court's order, objections will be accepted for a 20-day period following publication of legal notice in the Chico Enterprise Record, the newspaper of record. Objections submitted after 20 days will be deemed untimely. The date of publication in the Enterprise Record is the sole basis for the timing objection period.

Objections submitted on this supplement should focus on the three significant issues presented in this document: 1) consideration of diameter-limit alternatives; 2) clarity of LOPs for the northern spotted owl; and, 3) fulfillment of monitoring obligations for the northern spotted owl on other Mendocino National Forest projects. Extensive public involvement has already occurred for the 2012 EA, and the agency believes that focusing on the issues presented in this supplement will be the most constructive means of addressing the significant issues, completing the extended NEPA process for this project, and moving forward to achieve the important public interests served by the Smokey Project.

In submitting objections on this supplement, individuals or groups who submitted comments or objections in prior phases of the Smokey NEPA process may refer to prior comments to the extent that such comments relate to the issues addressed in this supplement. However, if an objector does refer to prior comments/objections, the objector should direct the agency to the specific location of the prior comments/objections and explain how each prior comment bears upon the issues raised in this supplement. General reference to, or incorporation of, prior comments/objections (including reference to entire pages), does not provide the specificity the agency needs in order to fully understand and consider an individual or group's comments. Therefore, the Forest Service asks that objections include as much specificity as possible.

Finally, in order for the agency to best understand and consider comments on this supplement, the Forest Service asks that objection issues be presented in the same order as the three issues that are discussed in this document.

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<sup>10</sup> For example, Tables 8A and 8B in section 8.2 below are organized differently and contain errata for some of the summary acreage figures displayed in EA Tables 1 and 2. Tables 8A and 8B of this supplement take precedence over EA Tables 1 and 2.

## **5. Issue 1 – Range of Reasonable Alternatives**

This section documents the consideration of alternatives that incorporate diameter limits.<sup>11</sup> Diameter limits place a maximum size limit on trees to be harvested, as measured in diameter at breast height (DBH).

Six alternatives have been considered, encompassing the range of diameter limits mentioned in public comments during scoping and objection processes, as identified in the District Court's February 2017 decision: two versions each of an 18", a 20", and a 24" DBH limit. As discussed below, in section 5.2, all six alternatives would be inconsistent with key elements of the Smokey Project's purpose and need, and would fail to achieve the agency's policy objectives for the project. Therefore, those alternatives do not warrant detailed consideration under NEPA or the Healthy Forests Restoration Act.

### ***5.1. Review Information***

The Proposed Action includes 933 acres of commercial thinning. Thinning addresses the primary purpose and need of the project by protecting late successional habitat, which provides Northern spotted owl (NSO) foraging habitat. The commercial thinning areas were selected according to location on the landscape, need for silvicultural treatment, likelihood of response to treatment, and accessibility. *Silviculture Report*, pp. 3-9, 11; AR509-15. Thinning of the forest would result in decreased fuels and would lower the risk of stand replacing fires and large-scale insect attacks, thus protecting habitat within the treated forest stands. Also, the thinned acres would provide protection to the broader landscape from wildfire damage by serving as areas of reduced fire spread and intensity, limiting the size and spread of wildfires. EA, p. 15; AR35. The commercial thin units would also be the only treatments to contribute to timber production, a secondary purpose and need of the Smokey Project.

#### **5.1.1. The Need to Retain Northern Spotted Owl Foraging Habitat**

An overarching purpose of the Smokey Project is to protect NSO nesting/roosting and foraging habitat. EA, p. 4; AR24, ("mid and late successional stage conifer stands should be managed to reduce their risk of mortality from wildfires, and to provide wildlife habitat including forage, nesting and roosting habitat for northern spotted owls"). The Smokey Project proposed commercial thin units contain NSO foraging habitat, but do not provide nesting/roosting habitat. Therefore, the protection of NSO foraging habitat is a focal point for evaluating an alternative's consistency with the Project's purpose and need.

#### **5.1.2. The Need to Thin Overstory Trees**

Fire suppression has resulted in an increase in stand densities and corresponding susceptibility to catastrophic fire and insect and disease attacks at a landscape level. *Silviculture Report*, p. 3; AR509. *See also* Fuels Report, p.4 [AR543] "Currently, approximately 75% of the proposed treatment area has a closed canopy [whereas].

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<sup>11</sup> A diameter limit alternative would not thin any trees with a diameter-at-breast-height (DBH) greater than specified.

... only 25%-30% of the area is estimated to have had a closed canopy prior to 1900.” There is a need to reduce stand densities as well as ground and ladder fuels.” Fuels Report, p. 6; AR545. Removal of some overstory trees would lessen the risk of a crown fire, reducing the risk of fires moving from the ground into the canopy of the stand. Fuels Report, p. 10; AR549.

The EA described the need to reduce the risk of losing mid-successional habitat to wildfire damage by thinning areas of overly dense forest. Thinning of the forest is also needed to ensure that mid-successional habitat can survive to grow into late-successional habitat. See EA at 4-6 [AR24-26] (“Protection of the Buttermilk LSR from Wildfire Damage”); EA at 6-7 [AR26-27] (“Development of Late Successional Stand Characteristics in the Buttermilk LSR”); EA at 11-12 [AR31-32] (Stand Density Reduction). Because it takes decades to regrow lost mid-successional habitat, the dense stands contributing to high fuel hazard represent a risk of long-term loss of this habitat.

### **5.1.3. The Proposed Action**

The Proposed Action does not have a diameter limit for commercial thinning. Rather, it is a thin-from-below prescription that would focus on leaving the largest, healthiest trees of desired mixed-conifer species by removing smaller, unhealthy, less desirable trees. Silviculture Report, p. 7; AR512. See also Silvicultural Prescription and Marking Guides, pp. 1-3; AR491-93.

The Proposed Action would retain all foraging habitat in the units identified for commercial thinning while reducing the fuel hazard. This would be accomplished by thinning from below across all diameters, while retaining the majority of large trees, and other structural elements, and ensuring that thinning would not reduce canopy below 40% in foraging habitat. Silvicultural Marking Guides, pp. 1-2; AR491-92 and 2011 BA, p. 47; AR229. Ground, ladder and canopy fuel hazards would be reduced while retaining the essential elements of NSO foraging habitat.

The EA also estimated that the Proposed Action would produce about 10,000 CCF<sup>12</sup> of timber for sale from the commercial thin units. However, cruise data collected after the timber was marked indicates that the Proposed Action would actually produce about 13,365 CCF.

### **5.1.4. Consideration of Diameter Limits in the EA**

The original EA evaluated a 10 inch upper diameter limit alternative. The 10” diameter limit would have only applied to the proposed commercial thinning units. In all other treatment units, no trees greater than 10” diameter breast height are proposed for removal. The 10” diameter limit alternative was eliminated from detailed consideration because it would not have sufficiently reduced forest canopy density, which is essential to achieve the project’s purpose and need of fuel reduction to protect forest stands and wildlife habitat. See EA, p.17-18; AR37-38

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<sup>12</sup> CCF is a unit of timber volume: one hundred cubic feet.

(“not reducing the overstory canopy would not result in the level of wildfire protection desired in the project area”).

## ***5.2. Supplemental Information***

The Forest Service evaluated 18”, 20”, and 24” diameter limit alternatives for consistency with the project’s purpose to protect NSO foraging habitat in the commercial thin units. The alternatives were also evaluated in terms of consistency with the secondary purpose of contributing to the economy through the harvesting and sale of timber. As explained in section 5.2.1., below, all of the diameter limit alternatives would fail to sufficiently protect NSO foraging habitat, and would significantly reduce the amount of timber offered for sale.

The diameter limit alternatives differ from the proposed action only in the treatment of the commercial thinning units, since those are the only units where trees greater than 10” would be cut. Thus, consistency of the diameter limit alternatives with the Smokey Project’s primary purpose and need is based on a) consistency with the specific purpose and need for treatment of the commercial units, and b) the relative importance of the commercial units in achieving the Smokey Project’s overall purpose and need.

The following discussion focuses first on the degree to which the diameter limit alternatives would achieve purpose and need within the commercial thinning units (section 5.2.1.). It then discusses the relative importance of the commercial thinning in achieving the overall purpose and need of the Smokey Project (section 5.2.2.).

### **5.2.1. Analysis of Diameter Limit Alternatives**

The Forest Service analyzed six diameter limit alternatives for consistency with the Smokey Project’s purpose and need. The alternatives consist of two versions each of an 18”, a 20” and a 24” diameter limit.

Consistency with the primary purpose of protecting NSO foraging habitat was determined by a two-part test. First, the alternative must not cause a direct loss of NSO foraging habitat due to excessive canopy reduction. Second, the alternative must reduce fuel hazard enough to prevent loss of NSO foraging habitat to wildfire. Both tests must be passed for an alternative to be consistent with the project’s purpose and need. An alternative would not meet the purpose and need if it reduced the fire risk to habitat but, in so doing, caused a direct and significant loss of habitat. Conversely, an alternative would not meet the purpose and need if it failed to effectively treat fire hazards in order to avoid direct habitat loss. The Smokey Project was designed to simultaneously address both important issues. As explained below, all six diameter limit alternatives fail one of these two tests.

A computer model, the Forest Vegetation Simulator (FVS)<sup>13</sup> was used to forecast post-treatment stand conditions related to the Smokey Project’s purpose of protecting NSO foraging habitat in the commercial thin units. Two of the FVS outputs are of primary importance in evaluating alternatives here: post-treatment

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<sup>13</sup> See Appendix 1, section 3 for further discussion of the FVS model, and its use in this evaluation.

canopy cover and post-fire basal area mortality. Post-treatment canopy cover of 40% or more indicates that NSO foraging habitat has been retained by an alternative. Post-fire basal area mortality of 25% or less indicates that an alternative would adequately protect habitat from loss to wildfire. (Further details regarding the sources of these thresholds are in Appendix 1, section 2)

The first iterations of the three diameter limit alternatives (18A, 20A, and 24A), were modeled in FVS to optimize basal area reduction in order to achieve the fuel reduction and forest health aspects of the project's purpose and need.<sup>14</sup> This approach was effective for alternatives 20A and 24A in achieving the project's fuel reduction goal, using the metric of post-fire basal area mortality of 25% or less. However, alternatives 20A and 24A resulted in significant reductions in canopy cover below 40% (32% and 30%, respectively), which would result in a loss of NSO foraging habitat, contrary to the project's purposes. Alternative 18A retained adequate canopy cover (48%), but its projected 66% basal area mortality failed to achieve the fuel reduction goal of the Project.

The excessive reduction of canopy cover in alternatives 20A and 24A is due to clumpy size class distribution in the stands (clumps of large trees, intermediate trees, and small trees, as well as some areas of mixed sizes). The 20" and 24" diameter limits forced heavier thinning within the clumps of size-classes smaller than the diameter limits (see section 4.2.1 in Appendix 1 for detailed discussion). This is important, because these smaller size classes do provide NSO foraging habitat, but only if canopy cover is over 40%.<sup>15</sup>

The failure of alternatives 18A, 20A, and 24A to meet the two-part test described above prompted the Forest Service to do a second round of modeling to determine whether a different prescription could adequately reduce projected basal area mortality (to achieve fire hazard reduction goals) and still retain at least 40% canopy cover (to maintain NSO foraging habitat).

The second iterations of the three diameter-limit alternatives (18B, 20B, and 24B) were modeled with a constraint on canopy cover reduction to retain the desired minimum level of 40%. This approach was effective for all modeled alternatives in achieving the Project's goal of retaining adequate canopy cover for NSO foraging habitat, but precluded the reduction of post-fire basal area mortality to 25% or less in any of the diameter-limit alternatives, thereby frustrating the Project's fire hazard reduction goals (projected basal area mortalities range from 43% to 51%).

The results of the FVS modeling indicate that none of the diameter-limit alternatives would pass both parts of the test for consistency with the purpose and need to protect NSO foraging habitat in the commercial thin units (details in section 4 of Appendix 1). All of the diameter-limit alternatives reduced basal area

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<sup>14</sup> "Basal area" represents the cross-sectional area of trees within a given area (measured at 4.5' above ground), providing a measure of how much tree-biomass occupies that area. Here, "optimizing basal area reduction" means emphasizing the thinning and removal of trees that contribute to an overly dense stand's excessive basal area.

<sup>15</sup> Foraging habitat is defined as having average tree diameters greater than 11" DBH and at least 40% canopy cover. BA, pp.38-39; AR220-21

mortality some, but only 20A and 24A reduced it below 25%. Therefore, the basal area mortality rates for 18A (66%), 18B (43%), 20B (43%) and 24B (51%) would be inconsistent with the purpose of protecting NSO foraging habitat from damaging wildfire. Alternatives 20B and 24B would be consistent with that purpose, but would reduce canopy cover to 32% and 30%, respectively, well below 40%; this would be inconsistent with protecting NSO foraging habitat from direct treatment effects.

In contrast, the Proposed Action does not have a diameter limit, so it is able to thin evenly, across all size class clumps. While some large trees would be removed, only 15% would be over 24" DBH. Importantly, the ability to remove some larger trees allows the Proposed Action to achieve reduction of canopy fuel hazard in the hard-to-replace larger size class clumps, and to retain canopy cover in the smaller size class clumps, both of which comprise the foraging habitat within the commercial thin units.

The effect of diameter limits on timber volume was assessed through analysis of the inventory data collected after commercial units were marked for the Proposed Action. The timber volume figures indicate that all alternatives would produce some timber volume, but only alternatives 20A and 24A would produce enough to offer economically viable sales. The volume from the other diameter limit alternatives would only be realized if the Forest Service subsidized a service contract to remove the timber.

In summary, the two 18" DBH alternatives were so restrictive as to preclude reducing basal area mortality to 25% or below. The Forest Service was unable to design a 20" or 24" DBH alternative that would simultaneously reduce fire hazard and retain adequate canopy cover for wildlife habitat purposes. This is because most of the units have a clumpy size class distribution, which precludes the 20" and 24" DBH alternatives from achieving both elements of the project's purpose and need--reducing stand density for fire hazard reduction and retaining sufficient canopy cover for wildlife habitat (see Appendix 1, section 4.2 for details). Conversely, the Proposed Action--the alternative selected by the agency for the Smokey Project--allows the agency to evenly thin all size-class clumps, resulting in treatment units that can much better achieve both the fuel hazard reduction *and* canopy cover goals of the project.

### **5.2.2. Importance of Commercial Units to Overall Project Purposes**

The commercial thinning units have larger importance to fulfilling the purpose and need of the Smokey Project than is implied by their footprint. They comprise about 15% of the total treatment acreage, but contain about 33% of the NSO foraging habitat being treated overall (588 acres of 1,790 acres). 2011 BA, pp. 47, 50-52; AR229, 332-34. Moreover, only the commercial thin units provide the opportunity to *fully* reduce basal area mortality below 25%.

As noted in 5.1.2 above, NSO foraging habitat is threatened by overly dense canopy conditions. The commercial thin units were selected according to location on the landscape, need and likelihood of response to silvicultural treatment, and

accessibility.<sup>16</sup> Silviculture Report, p.11; AR517. Although there are other areas of foraging habitat that would be treated (portions of the habitat enhancement and SPLAT fuel treatments<sup>17</sup>), they would have only their ground and ladder fuel hazards reduced. EA Appendix A, pp. 5, 7; AR80, 82. So, although fuel hazard in those units would be reduced somewhat, post-fire basal area mortality would remain twice or more as high as the desired level of 25%.<sup>18</sup>

Only the commercial thin units are in a position to be fully protected by having their canopy fuel hazard reduced in addition to the ground and ladder fuel hazards.<sup>19</sup> With full fuel hazard reduction (i.e. <25% basal area mortality), the commercial thinning units would stand a better chance of surviving a wildfire with less than half the damage that would occur in the partially treated other units. However, implementing diameter limits in the commercial thin units would forego that opportunity to fully protect a third of the overall foraging habitat proposed for treatment in the Smokey Project.

Once NSO foraging habitat is lost or severely damaged, it takes decades to recover. Such potential long-term impact makes it even more important to fully protect NSO foraging habitat where possible – in this case, within the commercial thin units. The failure of the diameter limit alternatives to do so renders them further inconsistent with the Smokey Project overall purpose and need.

### **5.3. Conclusion**

The Forest Service has given thorough consideration of the suggested 18”, 20”, and 24” diameter limit alternatives, evaluating their consistency with the Smokey Project’s purpose and need. None of the alternatives were consistent with the primary purposes of fuel hazard reduction and protection of mid- and late-successional habitat. All achieved the secondary purpose of timber production to some degree, but significantly less than is possible while achieving the primary purposes (as demonstrated by the Proposed Action). In any event, no degree of consistency with secondary purposes would overcome the diameter limit alternatives’ inconsistency with the primary purposes.

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<sup>16</sup> Accessibility in this context refers to the ability to access the units with ground-based or cable harvesting equipment that is necessary to remove the commercial sized trees that need to be thinned to reduce canopy density.

<sup>17</sup> SPLAT is the acronym for strategically placed area treatments, The SPLAT concept involves a combination of treatments arranged in a pattern (at a watershed or fireshed scale) that are designed to slow, alter direction, or help stop fires across the landscape. 2012 BA, p. 96; AR193. See also Finney, M. 2001. Design of regular landscape fuel treatment patterns for modifying fire growth and behavior. For. Sci. 47(2):219-228.

<sup>18</sup> The habitat enhancement and SPLAT fuel treatments would only thin up to 10” diameter trees, which is intermediate between the No Action and the 18” diameter limit alternatives in reduction of ladder and lower canopy fuels. Therefore, we can infer that the basal area mortality rates in those areas would be less than the No Action alternative (96%), and somewhat higher than the 18A or 18B alternatives (66% and 43%, respectively). See Appendix 1, section 4.2, Table 4.2.

<sup>19</sup> Thinning in all other treatment units is limited to trees under 10” DBH. EA Appendix A, p. 7; AR82. Trees of this size class are not part of the canopy, and therefore removal would not reduce canopy density and the related fuel hazard.

Because neither NEPA nor HFRA requires the detailed study of alternatives that are inconsistent with a project's purpose, none of the six diameter limit alternatives will be considered in further detail in this supplement.

## **6. Issue 2 – Limited Operating Periods**

The 2012 DN/FONSI adopted Limited Operating Periods (LOPs) to prevent noise or smoke associated with management activities from disturbing northern spotted owls during their breeding season. The LOP requirements do not apply to all treatment units; rather they apply conditionally, based upon a unit's proximity to known or potential northern spotted owl breeding locations.

For the sake of clarity in this discussion, we will distinguish between general LOP requirements and unit-specific LOP application.

- General LOP requirements are the general rules for determining where and when an LOP should be applied. These requirements are stated in the abstract and do not depend on site specific habitat or survey data. These general requirements were adopted by the 2012 DN/FONSI and have not changed since then.
- Unit-specific LOP application involves applying the general LOP requirements to particular project treatment units based on the most recent habitat and survey information. As a result, unit-specific LOP application is dynamic and can change as new information comes to light.

This section provides a consolidated explanation of the general LOP requirements and the process by which unit-specific LOP application is determined. It also summarizes the development of new survey and habitat information over the last several years, which has informed the current unit-specific application of LOPs. A more detailed accounting of the new information is provided in Appendix 3. Also provided in Appendix 3 are current (2017) LOP maps and tables with explanations of unit-specific LOP application. The current LOP information has been relegated to Appendix 3 because unit-specific LOP application is dynamic and must be re-evaluated every year in light of the most up-to-date information. To implement this dynamic process, the Forest Service evaluates habitat and survey information prior to commencement of each year's operations to determine the extent to which unit-specific application of LOPs needs to be adjusted to ensure consistency with the general LOP requirements.

### ***6.1. Review Information***

The general LOP requirements adopted by the 2012 DN/FONSI are based on two sources: a) the proposed action project specifications analyzed in the Forest Service 2011 Biological Assessment (BA), and b) the terms and conditions included in the incidental take statement of the 2012 Biological Opinion (BO) issued by United States Fish and Wildlife Service (USFWS).

The general LOP requirements have both temporal and spatial components—i.e., they apply for a specified period of time and in particular locations (based on a certain distance from known or potential breeding locations).

### **6.1.1. General LOP Requirements from the 2011 Biological Assessment**

The 2011 BA set forth the then-standard LOP for protection of spotted owl breeding: from February 1 through July 10, restrict noise- and smoke-generating operations within 0.25 miles of any unsurveyed nesting habitat or historic activity centers. The 2011 BA includes a larger buffer of 0.5 miles for noise from helitorch operations, AR201, and special allowances for prescribed burning during the LOP.<sup>20</sup> 2011 BA, pp. 19-20; AR201-2. The LOP in the 2011 BA included a waiver provision, which allows the LOP to be lifted if surveys indicate that nesting habitat is not occupied or the owls in known home ranges are non-reproductive. 2011 BA, p. 20; AR202.

The February 1 to July 10 period set forth in the 2011 BA provides protection during the owl's active breeding season, including nest development, egg production, incubation, and feeding of dependent young in the nest. This period prevents the adults from being frightened by noise sufficient to disrupt their breeding attempt, cause them to leave their incubated eggs for too long, or abandon the young still in the nest. Research has indicated that by July 10, young owls have left their nests and become mobile. 2012 BO, pp. 68-92; AR18751-75. Because the LOP is specifically designed to protect reproductive owls, non-breeding adults do not require an LOP.

The 2011 BA listed unit-specific LOPs based on application of the general requirements described above, using the best available information at the time.

### **6.1.2. General LOP Requirements from the 2012 Biological Opinion**

During the 2012 Smokey consultation process, the USFWS evaluated the general LOP requirements proposed in 2011 BA, noting that they could fail to prevent adverse impacts to fledged young later in the season. 2012 BO, pp. 69-70; AR18752-53. Therefore, the USFWS included a modification of the general LOP requirements as a term of the Incidental Take Statement (ITS). 2012 BO, p. 109; AR18792. The modified LOP provided: "Implement a limited operating period from February 1 to September 15 in the units containing suitable nesting/roosting or foraging habitat proposed within 0.25 mile of known and/or historic activity centers, based on survey data . . . [And, i]f current protocol-level survey information is not current/available, a limited operating period from February 1 to September 15 shall be implemented within 0.25 mile of a historic activity center and any unsurveyed nesting/roosting habitat." *Id.* The extension until September 15 was added to protect any fledged young still in the vicinity of the nesting area or within the surrounding foraging habitat.

The 2012 BO's LOP provision included additional guidance based on then-current survey information and alternative LOP approaches in the absence of survey data. *See* 2012 BO, p.109; AR18792 ("Alternatively, the Forest Service may collaborate

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<sup>20</sup> The helitorch and prescribed burning LOPs are not applicable to the commercial thinning operations to be implemented by Trinity River Lumber Company, which were of particular concern to the Court during merits briefing.

with the Service to determine a comparable methodology for implementing the February 1 to September 15 limited operating period if surveys are not completed to protocol.”).

As with the 2011 BA, the 2012 BO listed unit-specific LOPs based on application of the general requirements set forth in the terms of the ITS, using the available information at the time. The BO indicated that unit-specific LOPs could be released if “protocol level surveys indicate that they are unnecessary.”

The Forest Service adopted the general LOP requirements from the 2012 BO in the Smokey Project Decision Notice. DN/FONSI, p. 2; AR11 (“My decision [] incorporates the terms and conditions of the Incidental Take Statement section of the [USFWS] Biological Opinion.”). The EA also stated that the terms and conditions of the 2012 Biological Opinion were incorporated into the Project’s specifications. EA, p. 33; AR53.

### **6.1.3. The Combined General LOP Requirements from the BA and BO**

The final, general LOP requirements for the Smokey Project are a combination of the LOP requirements set forth in the 2011 BA and 2012 BO. In addition to the LOP requirements from the 2012 USFWS BO incidental take statement, the Forest Service committed to apply the LOP provisions from the 2011 BA, which provide some protections beyond those enumerated in the Terms and Conditions of the USFWS 2012 BO.<sup>21</sup> Specifically, the 2011 BA requires an LOP from February 1 to July 10 for treatment units lacking nesting, roosting, or foraging (NRF) habitat, but that are located within 0.25 miles of any unsurveyed nesting habitat or historic activity centers.

The following summarizes the general LOP requirements for the Smokey Project:

- Operations that have the potential to increase noise above ambient levels, and occurring in portions of units with suitable nesting/roosting or foraging habitat that is within 0.25 mile of known and/or historic activity center or unsurveyed nesting habitat are subject to a February 1 – September 15 LOP.<sup>22</sup> This LOP only applies to the portion of a treatment unit within the 0.25-mile zone; it does not apply to areas of the treatment unit beyond 0.25-miles.
- For activities occurring outside of suitable nesting/roosting or foraging habitat and that have the potential to increase noise above ambient levels –
  - Helitorch operations are subject to a February 1 – July10 LOP<sup>23</sup> within 0.5 miles of a known and/or historic activity center or unsurveyed nesting habitat.

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<sup>21</sup> The 2011 BA’s general LOP requirements were part of the Smokey Project’s conservation measures and therefore an inherent aspect of the Project subject to formal consultation. As such, USFWS considered the 2011 BA’s general LOP requirements a required element of the Project. *See* 2012 BO, p. 13; AR18696 (“Because conservation measures are pledged in the project description by the action agency, their implementation is required under the terms of the consultation”).

<sup>22</sup> 2012 BO, p. 109; AR18792

<sup>23</sup> Helitorch operations are confined to SPLAT unit I, which does not contain any nesting/roosting or foraging habitat that would trigger the September 15 LOP. 2011 BA, Table 21, p. 50; AR232. In any

- Ground operations are subject to a February 1 – July10 LOP<sup>24</sup> within 0.25 miles of a known and/or historic activity center or unsurveyed nesting habitat.
- For activities that have the potential to create smoke within 0.25 miles of an occupied activity center or unsurveyed nesting habitat<sup>25</sup> –
  - Burning is subject to a seasonal restriction of February 1 – July10, however burning may take place if the following conditions can be met: 1) Light to moderate smoke may be present within a canyon or drainage if it dissipates or lifts within 24 hours. 2) If heavy or concentrated smoke begins to inundate nesting/roosting habitat or historic activity centers late in the afternoon, ignition should be discontinued.
- Caveats<sup>26</sup> –
  - Both the 2011 BA and the 2012 BO listed LOPs for specific units, based on the owl location and habitat information available at the time. Because that information has changed, the unit-specific LOP application has also changed (discussed further below and in Appendix 3).
  - The 2012 BO allows for lifting a listed, unit-specific LOP where current protocol surveys indicate the LOP is not necessary; that is, if nesting habitat is not occupied or the northern spotted owls in known home ranges are non-reproductive.
  - If current protocol level survey information is not available, the Forest Service may collaborate with the Fish and Wildlife Service to determine a comparable methodology for implementing the February 1 – September 15 LOP.

#### **6.1.4. Discretion to Expand LOP Application**

The Forest Service may exercise its discretion to apply an LOP beyond 0.25 miles from known and/or historic activity centers or unsurveyed nesting habitat in order to provide added conservation benefits to the spotted owl. Expanded application would be based on site-specific information that indicates increased potential for harassment of adult northern spotted owls or harm to juvenile northern spotted owls due to actions occurring during the breeding season but beyond the 0.25 mile buffer.<sup>27</sup> Such site-specific information could include, but is not limited to: topographical features, habitat conditions, and survey data.

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event, helitorch operations would not occur after July 10 because burning conditions would be out of prescription long before July.

<sup>24</sup> 2011 BA, p. 19; AR201.

<sup>25</sup> 2011 BA, p. 19; AR201.

<sup>26</sup> 2012 BO, pp. 13, 109; AR18696, 18792.

<sup>27</sup> This is in line with the reasonable and prudent measure prescribed in the Incidental Take Statement of the 2012 BO: “Minimize the potential for harassment of adult northern spotted owls and harm of juvenile northern spotted owls in the action area due to actions occurring during the breeding season within suitable habitat likely to be occupied by northern spotted owls.” 2012 BO, p. 108; AR18791. The general LOP requirements are non-discretionary terms and conditions of the Incidental Take Statement that implement this reasonable and prudent measure. *Id.* p. 109; AR18792. However, the general LOP requirements

Additionally, the Forest Service may exercise its discretion to apply an LOP beyond the required 0.25 mile buffer for administrative purposes. This would generally occur with treatment units that only partially overlap the LOP buffer. Some examples could include, but are not limited to:

- Including small portions of units that lie outside of the buffer in order to simplify contract administration.
- Extending the LOP to a unit boundary, road, or topographic feature such as a stream or ridge, for easier identification on the ground.

## ***6.2. Supplemental Information***

This section briefly summarizes more detailed information from Appendix 3 regarding changes in the unit-specific application of LOPs since the DN/FONSI was issued. All changes in LOPs have been adjustments at the unit level to reflect new information. No changes to the general LOP requirements have been made.

Since the Decision Notice was signed, several years of protocol-level surveys have been completed (see Appendix 3, section 2.1). Also, formal ESA consultation between the Forest Service and USFWS has been reinitiated twice: a) in 2014 to address the 2012 Critical Habitat Rule, and b) in 2015 to address new NSO activity centers detected by the protocol-level surveys. The two consultations resulted in changes to some of the unit-specific LOPs required by the terms and conditions of the 2014 and 2015 BOs. See Appendix 3, section 2.2.

Also, the Forest Service issued a letter in April 2016 to the purchaser of the timber sale that was authorized by the Smokey Project DN/FONSI. The letter set forth the default LOPs for the commercial thinning units in the absence of surveys, but also recognized that protocol surveys could affect the manner in which LOPs would be applied to individual units.

Current (2017) unit-specific application of LOPs are displayed in Appendix 3, section 2.4, Tables 2.1-2.4. This is different from what was specified in the 2011 BA, and the 2012, 2014 and 2015 BOs. However, the current unit-specific application of LOPs is based on the best available information and is consistent with the general LOP requirements described above. Future unit-specific application of LOPs may or may not differ from the 2017 version, depending on whether new information arises that indicates a change is needed. However, the same general LOP requirements will apply then as now.

## **7. Issue 3 – Endangered Species Act Monitoring Requirements**

In its February 2017 decision, the District Court found that the Forest Service failed to take the required “hard look” at questions related to the Mendocino National Forest’s northern spotted owl monitoring obligations for past projects.<sup>28</sup> As explained in more

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anticipate most, but not all situations needing an LOP, and therefore do not preclude additional, discretionary actions to fulfill the intent of the reasonable and prudent measure.

<sup>28</sup> *Conservation Cong. v. United States Forest Serv.*, No. 2:13-CV-01977-JAM-DB, 2017 WL 661959, at \*17 (E.D. Cal. Feb. 17, 2017) (“As noted previously, this Court is concerned by the fact that the USFS has

detail below, the statements in the record that led to the Court’s finding created an incomplete and misleading picture of the owl monitoring that was required and that has been conducted by the Mendocino NF. In actuality, the Mendocino National Forest was and is in full compliance with its ESA monitoring obligations.

### ***7.1. Review Information***

Unclear statements in the Smokey Record such as, “[t]he forest has not done the monitoring” (AR174) miscommunicated the Mendocino NF’s compliance with its monitoring obligations. The Forest Service recognizes that this and other statements were vague and misleading. What the Forest Service failed to convey was that the agency had not engaged in the monitoring of several projects, but that the lack of such monitoring was appropriate due to various factors, such as projects being cancelled or projects not yet having been implemented—both of which resulted in the Mendocino NF “not do[ing] the monitoring” for those projects. The Forest Service did not mean to imply that it had failed to comply with mandatory monitoring and reporting requirements, because that was not, and is not, the case.

### ***7.2. Supplemental Information***

The Forest Service has met all the monitoring requirements set forth in the Terms and Conditions of Biological Opinions from the FWS. What the agency failed to explain in its prior NEPA and ESA documentation was that no monitoring obligations *had been missed* when it stated in the response to comments that no monitoring had been done. Scoping Summary and Issue Identification, p. 7; AR-174.

The first point to make clear is that the USFWS only establishes monitoring duties for projects that go through formal consultation and have Terms and Conditions included with an ITS; no monitoring obligations are established for projects that go through informal consultation or have no consultation (i.e., projects that have “no effect” on listed species or are “not likely to adversely affect” listed species). Another important point is that the monitoring obligations included with Incidental Take Statements are for post-implementation monitoring—i.e., monitoring that occurs after project treatments have been implemented.

During the life of the Mendocino National Forest Land and Resource Management Plan (Forest Plan), there have been 15 projects, including the Smokey Project, that have gone through formal consultation for the northern spotted owl (see Table 7A, below). Of these, four projects were cancelled (Blands, Gulch, Divide Auger, Cold Chimney/Gulch), so the monitoring obligations associated with those projects were never triggered. Of the remaining 11 projects, three have not yet been implemented (Boardman Ridge Burn, Jenk’s Camp Fuel, Smokey), so the monitoring duties on

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admittedly failed to do the monitoring required for other projects. Although the Court declines to find that this deficiency mandates preparation of an EIS, the fact that the agency fails to address this issue in its decision documents raises suspicion. While the concern is noted in Appendix Z of the EA, the agency merely admits that monitoring has not occurred and offers no explanation of why, no description of how the issue will be ameliorated, and no rationale for why this deficiency does not render the Project’s impacts “uncertain.” It does not appear the agency took a hard look at this question.”).

those projects have not yet been triggered. Of the remaining eight projects, the sole reporting requirement for seven of them was for the Forest Service to report dead or injured owls (Kop Gibson, LP SUP, Saddle, LP RUP, Town/Flat, Sawmill Enduro, Upper Lake Enduro); there are no annual reporting requirements for these projects and no dead or injured owls have been detected for them. This leaves one project, Westshore, for which project implementation has largely been completed and for which all monitoring and reporting obligations have been fulfilled.

**Table 7A – Projects with ESA Monitoring Requirements**

<b>Project</b>	<b>BO Reporting Requirement</b>	<b>Annual Report Required?</b>	<b>Report submitted?</b>
Blands	Habitat harvested upon completion, Report dead or injured owls	N/A - project cancelled	N/A - project cancelled
Gulch	Progress of project, amount of habitat modified. Report dead or injured owls	N/A - project cancelled	N/A - project cancelled
Divide Auger	Progress of project, amount of habitat modified Report dead or injured owls	N/A - project cancelled	N/A - project cancelled
Cold Chimney/ Gulch	Progress of project, amount of habitat modified. Report dead or injured owls	N/A - project cancelled	N/A - project cancelled
Boardman Ridge burn	Habitat loss or take. Report dead or injured owls	Yes, but project not yet implemented	N/A – project not yet implemented
Jenk’s Camp Fuels	Habitat loss or take. Report dead or injured owls	Yes, but project not yet implemented	N/A – project not yet implemented
Smokey	Progress of project, amount of habitat modified, survey results, changes to project not discussed in BA. Report dead or injured owls.	Yes, but project not yet implemented	N/A – project not yet implemented
Kop Gibson	Report dead or injured owls only	No	Not applicable
LP SUP	Report dead or injured owls only	No	Not applicable
Saddle	Report dead or injured owls only	No	Not applicable
LP RUP	Report dead or injured owls only	No	Not applicable
Town / Flat	Report dead or injured owls only	No	Not applicable
Sawmill Enduro	Report dead or injured owls only	No	Not applicable
Upper Lake Enduro	Report dead or injured owls only	No	Not applicable

**Table 7A – Projects with ESA Monitoring Requirements**

<b>Project</b>	<b>BO Reporting Requirement</b>	<b>Annual Report Required?</b>	<b>Report submitted?</b>
Westshore	Changes in expected habitat or owl take from that predicted in the BA. Report dead or injured owls	Yes	70% of project completed in 2010; monitoring completed and reports submitted on 11/3/10 and 2/22/11. Remaining thinning completed in 2013, with affected habitat accounted for in 2010 and 2011 reports. Fuels treatment still to be done.

The Forest Service did not refer to the monitoring of Westshore Project in the Smokey documentation largely due to the timing of the monitoring and reporting for Westshore and the parallel processes for Smokey. For example, when Conservation Congress submitted its November 2009 Freedom of Information Act request inquiring about project monitoring, implementation of Westshore had not yet begun. Therefore, monitoring reports had not yet been formulated. And, when Conservation Congress submitted its March 17, 2010, comments on the Smokey Project regarding monitoring reports (AR3630), the Westshore project had not started operations, so the monitoring obligations had still not been triggered. This is the point in time when the Forest Service stated in its May 18, 2010 response to scoping comments that “[t]he forest has not done the monitoring.” AR174. Later, when Conservation Congress submitted its August 15, 2010, objection on the Smokey Project (AR1561), Westshore was in its first year of treatment and the monitoring report was not yet due (because reports are due at the start of the following calendar year). In the Forest Service’s September 10, 2010 objection response, the agency stated that “[t]he [MNF] acknowledges that the cited [monitoring] requirements have not been met, and is in the process of compiling information to satisfy monitoring requirements of past Biological Opinions for reporting to USDI-FWS and NOAA Fisheries.” AR1539. The intent of this language was to convey that the Forest Service was in the process of compiling its monitoring information, including that for Westshore. Ultimately, the Forest Service submitted its monitoring reports to the FWS for the Westshore Project on November 3, 2010 and February 22, 2011, consistent with the requirements in the Westshore Biological Opinion.

Treatments on the Westshore Project started in 2010, and Forest Service monitoring tracked project implementation. The Forest Service’s monitoring revealed that the Project was actually affecting less nesting habitat than contemplated by the Westshore NEPA and consultation documents. The Westshore BA estimated that 539 acres of nesting habitat would be downgraded to foraging habitat. However, during the implementation process, several treatment units were reduced in size or dropped

entirely. As a result, the Forest Service reported in its monitoring reports (in 2010 and 2011) that a total of 426 acres of habitat was downgraded. No further reports have been submitted because, although Westshore operated after the 2011 report, all of the acres that were downgraded had already been reported in 2011.

Consequently, the monitoring of the Westshore Project—the only Project for which the Forest Service has had monitoring obligations related to habitat alteration—has indicated that less nesting habitat has been affected by Forest Service treatments than contemplated during the consultation process. This monitoring information does not affect the expected impacts of the Smokey Project or significantly modify the environmental baseline.

### **7.3. Conclusion**

The Forest Service has met all the monitoring requirements set forth in the Terms and Conditions of Biological Opinions from the FWS. To date, the only monitoring information that has been required is that for the Westshore Project, and that monitoring information has shown that the Forest Service has impacted less owl habitat than originally expected with that Project. This information did not affect the expected environmental impacts of the Smokey Project or have a material effect on the environmental baseline for ESA consultation purposes.

## **8. Acreage Clarifications**

In its February 2017 decision, the District Court advised the Forest Service to clarify project acreage information in the Smokey EA supplement.<sup>29</sup> The Forest Service reviewed the acreage figures in the original EA and 2011 BA for consistency, and checked the EA summary tables for aggregation accuracy. Details of this review are provided in Appendix 2.

Some inconsequential errors were detected in the EA summary Table 1 (activities) and Table 2 (achievement of purpose and need). However, the detailed treatment unit acreages in EA Appendix A and the 2011 BA are in total agreement.<sup>30</sup> Therefore, the effects on northern spotted owl disclosed in the 2011 BA and summarized in the EA are consistent with the unit treatment acreages proposed in EA Appendix A and adopted in the DN/FONSI.

Some of the confusion in acreages identified by the Court was due to the minor errors noted above, and some was due to inconsistent formatting and display of statistics in EA Table 1 – Summary of Activities. Further confusion, related to EA Table 2, can be

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<sup>29</sup> *Conservation Cong. v. United States Forest Serv.*, No. 2:13-CV-01977-JAM-DB, 2017 WL 661959, at \*17 (E.D. Cal. Feb. 17, 2017) (“the Court agrees that the EA contains varying statistics regarding the number of acres to be treated; while a thorough read of the decision documents clarifies these differences, the EA’s lack of precision does make the document confusing. Although this issue would not likely, by itself, warrant a finding against the USFS, the agency would be wise to be more careful in its revision.”).

<sup>30</sup> This is based on comparison of EA Appendix A Tables A1 through A5 with 2011 BA Tables 1 through 9.

attributed to absence in the record of a crosswalk of activities to accomplishment of the purpose and need. Such a crosswalk is included in Appendix 2

Tables 8A and 8B below display the correct statistics for activities and achievement of the project's purpose and need, respectively. Table 8A has also been reformatted to be more consistent between the silvicultural, fuels, and habitat enhancement activity categories. These tables replace EA Tables 1 and 2.

<b>Table 8A – Summary of Activities</b>		
<b>Activity</b>	<b>Proposed Action</b>	<b>No Action</b>
<b>Silvicultural Treatments (acres)</b>		
Commercial thinning (CT) in LSR w/cable yarding	178	0
CT in LSR w/ground-based yarding	559	0
<b>Subtotal CT in LSR</b>	<b>737</b>	<b>0</b>
CT in Matrix w/cable yarding	15	0
CT in Matrix w/ground-based yarding	181	0
<b>Subtotal CT in Matrix</b>	<b>196</b>	<b>0</b>
<b>Total CT<sup>31</sup></b>	<b>933</b>	<b>0</b>
Plantation thinning in LSR	268	0
Plantation thinning in Matrix	132	0
<b>Total plantation thinning</b>	<b>400</b>	<b>0</b>
<b>Total of silvicultural treatments</b>	<b>1333</b>	<b>0</b>
<b>Fuel Treatments to Create SPLATs (acres)</b>		
Prescribed fire in LSR	2,101	0
Mechanical treatments in LSR	514	0
<b>Subtotal fuel treatments in LSR</b>	<b>2,615</b>	<b>0</b>
Prescribed fire in Matrix	588	0
Mechanical treatments in Matrix	123	0
<b>Subtotal fuel treatments in Matrix</b>	<b>711</b>	<b>0</b>
<b>Total fuel treatments</b>	<b>3,326</b>	<b>0</b>
<b>Habitat Enhancement Treatments (acres)</b>		
Meadow improvement	405 <sup>32</sup>	0
Understory thinning	1,273 <sup>33</sup>	0
<b>Total habitat enhancement treatments</b>	<b>1,678</b>	<b>0</b>
<b>Total treatment acreage (silviculture + fuel + habitat)</b>	<b>6,337</b>	<b>0</b>
<b>Road Management (miles)</b>		
Temporary road construction (miles)	1.3	0
Use of existing temporary roads (miles)	1.5	0
Use of existing water drafting sites (each)	2	0

<sup>31</sup> All commercially thinned units will have borate treatment on freshly cut stumps.

<sup>32</sup> Additional undetermined acreage of meadow improvement is included in 'understory thinning' treatment category. ERRATA - this acreage figure differs from EA Table 1 because it omitted 247 acres of meadow improvement w/in SPLATS, and double-counted 586 acres which are properly included in 'understory thin for habitat enhancement' (see Appendix 2, section 2 for details).

<sup>33</sup> ERRATA - this acreage figure differs from EA Table 1 because it omitted 254 acres of understory thinning of oak stands w/in SPLATs (see Appendix 2, section 2 for details).

<b>Table 8A – Summary of Activities</b>		
<b>Activity</b>	<b>Proposed Action</b>	<b>No Action</b>
New water drafting sites (each)	6	0

<b>Table 8B – Achievement of Purpose and Need</b>		
<b>Indicator</b>	<b>Proposed Action</b>	<b>No Action</b>
<b>A. Wildlife</b>		
1. Number of LSR acres with reduced risk of wildfire damage	4,738 <sup>34</sup>	0
2. Mean fire return interval (years)	245	321
3. % of LSR that may experience fires intense enough to remove some or all of the canopy	69.1	81.4
4. % of LSR that may experience fires with a flame length greater than 4 ft.	67.0	81.0
5. LSR acres with a secondary benefit of reducing the risk of large scale insect attacks	737	0
6. Number of acres of understory thinning to accelerate late successional characteristics and reduce risk of wildfire mortality	1,019 <sup>35</sup>	0
7. Number of acres of precommercial plantation thinning to develop late successional characteristics and reduce risk of wildfire mortality	400	0
8. Number of acres with a secondary benefit of promoting the development of late successional characteristics by reducing risk of wildfire mortality	933	0
9. Number of acres of borax treatment used to maintain canopy cover and live large trees.	933	0
10. Number of acres of understory thinning (removing conifers > 10" DB H) used to improve conditions for hardwoods.	1,019 <sup>36</sup>	0
11. Number of meadow acres treated by removing small (> 10" DBH) conifers in meadows and within 20' beyond meadow edges.	405 <sup>37</sup>	0
<b>B. Fire and Fuels</b>		
1. Number of acres of strategically placed treatments (SPLATs)	4,275	0

<sup>34</sup> ERRATA - this figure differs from EA Table 2 because it inadvertently omitted 1,373 acres of LSR treatments outside of SPLATs (see Appendix 2, section 3 for details).

<sup>35</sup> Includes only acreage outside of SPLATs. Understory thinning w/in SPLATs is not included, but would also contribute to this indicator on an undetermined number of acres incidental to achievement of fuel hazard reduction.

<sup>36</sup> Includes only acreage outside of SPLATs. Understory thinning w/in SPLATs is not included, but would also contribute to this indicator on an undetermined number of acres incidental to achievement of fuel hazard reduction.

<sup>37</sup> ERRATA – this figure differs from EA Table 2; see footnote for ‘meadow improvement’ activity in Table 8A, above.

<b>Table 8B – Achievement of Purpose and Need</b>		
<b>Indicator</b>	<b>Proposed Action</b>	<b>No Action</b>
2. Mean fire return interval in the project area (years)	245	321
3. % of the treated units that may experience fires intense enough to remove some or all of the canopy	18.2	80.2
4. % of the project area that may experience fires with a flame length greater than 4 ft.	15.0	79.6
5. Number of timber harvest, pre-commercial and understory thinning acres with post activity fuels treatments	2,510	0
<b>C. Timber Production</b>		
1. Estimated volume of timber that would be offered for sale (CCF)	13,185 <sup>38</sup>	0
<b>D. Forest Health</b>		
1. Acres with reduced stand densities and reduced risks of severe disturbance	933	0
2. Acres of plantations thinned to reduce competing vegetation	400	0
3. Number of acres with borax treatment to freshly cut stumps to prevent the creation of new root disease infection centers	933	0

The Forest Service has carefully reviewed both detailed and aggregated acreage figures in the record, and determined that all individual unit acreages were consistent and correct. Clarification and some minor errata have been provided. Because the effects analysis in the biological and other supporting documents are based on the correct acreage, the clarification here does not change any expected effects to the owl or other resources.

## **9. New Information / Changed Circumstances**

In November 2015, the Forest Service issued a Supplemental Information Report (2015 SIR) for the Smokey Project EA. The 2015 SIR documented evaluation of new information and changed circumstances regarding the northern spotted owl and Pacific fisher. The 2015 SIR concluded that the new information and circumstances did not indicate that the proposed action would result in significant or uncertain impacts. 2015 SIR, p. 9; AR09.

Since the 2015 SIR was issued, no other new information or changed circumstances have arisen that suggest the proposed action might result in significant or uncertain impacts. Also, the additional analysis and clarifications documented in this Supplement did not expose any substantive errors in the information upon which the 2012 EA and DN/FONSI were based. Therefore, no new information or changed circumstances have arisen that warrant further analysis beyond the topics discussed in this supplement.

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<sup>38</sup> Updated estimate based on cruise data collected after the timber was marked, and which indicates that the Proposed Action would actually produce about 13,365 CCF. A change from initial volume estimates is typical after the marked timber has been cruised, and is due to better data on the tree dimensions, amount of defect, and other factors that affect the volume of merchantable timber that the marked trees will yield. It is not due to any change in the harvest prescription, marking guides or other management requirements upon which environmental effects analyses have been based. Therefore, the changed volume estimate does not affect any of the effects disclosed in the EA.

## **10. Overall Conclusion**

Based on the following considerations, the Forest Service believes this supplement to the Smokey Project EA cures the NEPA violations identified in the District Court's February 17, 2017 decision and satisfies the requirements of the Court's May 26, 2017 order.

The supplement documents a thorough evaluation of 18", 20", and 24" diameter limit alternatives for consistency with the Smokey Project's purpose and need. None of the diameter limit alternatives would be consistent with the Smokey Project's primary purposes of fuel hazard reduction and protection of mid- and late-successional habitat. Therefore, neither NEPA nor HFRA require the diameter limit alternatives to be studied in further detail.

General LOP requirements that were fragmented in the Smokey Project record have been consolidated and clarified. Unit-specific application of the LOPs are consistent with the general LOP requirements and are based on the most current information.

NSO-related monitoring requirements have been clarified and summarized. The agency has complied with all mandatory monitoring requirements for the Northern spotted owl.

The Forest Service has clarified project acreage figures. The effects analysis in the EA's biological and other supporting documents were based on the correct unit acreage. Therefore, the analysis and findings in the original EA and DN/FONSI were based on accurate information.

Based on clarifications regarding LOPs, monitoring, and acreage statistics, the Smokey Project Finding of No Significant Impact remains valid and need not be revisited.

## **11. Appendices**

- Appendix 1 – Evaluation of Diameter Limit Alternatives
- Appendix 2 – Acreage Clarification
- Appendix 3 – Unit-Specific LOP Application and History